Atharv R. Belsare

Salt Lake City, Utah | +1 801-808-8291 | atharv.belsare@gmail.com | http://www.linkedin.com/in/atharv-belsare

Education

University of Utah | Salt Lake City, UT　　　　　　　　　　　　　　　　　　　　　　*Aug 2022 – Present*
Master of Science – Computer Science (**GPA – 3.71**)　　　　　　　　　　　　　Expected Graduation, May 2024

Marathwada Mitra Mandal's College of Engineering | India　　　　　　　　　　　　　*Aug 2017 – May 2021*
Bachelor of Engineering in Electronics and Telecommunications
CGPA – 8.26/10, **First Class with Distinction**, ranked 3rd in the department's final year, scoring a CGPA of 10.

Professional Experience

University of Utah | Salt Lake City, UT　　　　　　　　　　　　　　　　　　　　　　*Dec 2022 – Present*
Graduate Research Assistant
- Implemented advanced machine learning algorithms to predict user intentions and optimize trajectory planning on 7DoF robotic arm using reinforcement learning, resulting in a 35% reduction in error rates.
- Developed image recognition algorithms using computer vision techniques for robotic arm manipulation, resulting in a 95% object detection and classification accuracy rate.
- Developed and implemented a machine learning model utilizing deep learning techniques to predict grasping points on point cloud object data, improving object manipulation accuracy and enabling precise robotic control. Trained the model on a labeled dataset, optimizing its ability to extract features and map them to predicted grasping points, resulting in successful predictions for unseen point cloud objects.

Tata Consultancy Services | Pune, India　　　　　　　　　　　　　　　　　　　　　*Aug 2021 – Aug 2022*
Full Stack Modern Web Apps Developer
- Managed the non-production (test) region, ensuring its smooth operation and availability for testing purposes.
- Performed comprehensive code testing and conducted thorough code reviews and debugging to identify and resolve issues before code elevation to production.
- Developed customized scripts and tools to streamline the server migration process, reducing manual efforts by 30% and enabling faster deployment of applications on new servers.
- Developed and executed a data processing system for financial corporation clients, resulting in an increase of >95% accuracy and a reduction in processing time by 50%.

IOGreen Solutions | Pune, India　　　　　　　　　　　　　　　　　　　　　　　　*Jul 2020 – Mar 2021*
Full Stack Developer Intern
IOgreen Solutions is a Pune-based Company specializing in the Internet of Things Domain and automation.
- Developed a custom application server using Flask, automating code processes, and reducing development time by 40%, resulting in increased efficiency and productivity for the development team.
- Collaborated with team members to improve the Request-Response model, reducing response time by 30% and improving user experience.

Projects

CryptoProphet: Investing Intelligently　　　　　　　　　　　　　　　　　　　　　　*Jan 2023 – May 2023*
- Developed a machine learning model using clustering techniques to accurately predict changes in cryptocurrency prices with an 80% accuracy rate, resulting in increased investor profits.
- Implemented regression analysis to identify critical factors affecting cryptocurrency prices, such as market trends and trading volume, improving the accuracy of price predictions by 15%.
- Implemented machine learning algorithm for time-series forecasting, resulting in a 95% accuracy rate for predicting prices on unseen data.
- Developed and implemented a cutting-edge algorithm that analyzed trends in various cryptocurrencies, providing investors with personalized investment options tailored to their risk tolerance and portfolio diversification goals, ultimately reducing loss percentages by up to 40%.

Smart Battery Charger for Electric Vehicles　　　　　　　　　　　　　　　　　　　　*Aug 2020 – May 2021*
- Developed a mobile charging system, utilizing advanced algorithms to detect and charge multiple types of EV batteries, resulting in a 20% reduction in charging time.
- Designed a user-friendly interface for the Smart Battery Charger and executed comprehensive testing plans, identifying, and resolving multiple critical errors in the system.
- **Published a research paper** titled – "*Design and Development of Smart Battery Charger for EVs using Single phase Vienna Rectifier*" ISBN No: 979-8-5412-2027-8.

Skills

Programming: Python, C, C++, HTML, CSS, JavaScript, MySQL, ROS, COBOL.	**Platforms:** Linux, Windows, IBM Mainframes.
Tools: Git, GitHub, GitLab, AWS, Docker, Flask, IBM DB2.	**Hardware:** Raspberry Pi, ARM, Arduino.
Libraries: NumPy, Pandas, SciPy, PyTorch.	**Languages:** English, Marathi, Hindi.

Relevant Certifications

Certifications – Python Programming (Microsoft & University of Michigan), Going Cloud Native (AWS), Computer Networking (Google Inc.), Applied Machine Learning (University of Michigan), IoT using Python (UC Irvine), Cybersecurity and IoT (Kennesaw State University).